

REMARKS

The Examiner's Office Action of April 13, 2005 has been received and its contents reviewed. Applicants would like to thank the Examiner for the consideration given to the above-identified application.

Claims 1, 77-84, 87-90 and 93-102 are pending for consideration, of which claims 1 and 77-80 are independent. In view of the following remarks, reconsideration of this application is now requested.

Referring now to the detailed Office Action, claims 1 and 75-96 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1 to 12 of U.S. Patent 6,472,684 in view of Akbar (U.S. Patent No. 6,656,845 – hereafter Akbar), Yamazaki et al. (JP 11-154714 and the Derwent Translation of this document – hereafter Yamazaki) and Koyama (U.S. Patent 5,793,344 – hereafter Koyama). Further, claims 1 and 75-96 stand rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 30 of U.S. Patent 6,509,602 in view of Akbar, Yamazaki et al. and Koyama. In response, Applicants respectfully request that the double patenting rejections be held in abeyance until an indication of allowed subject matter is provided. Applicants note that claims 75-76, 85-86 and 91-92 have been cancelled previously. Hence, the rejection of these claims should be rendered as moot.

Claims 1 and 102 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki and Akbar. Further, claims 77-84, 87-90 and 93-96 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki and Akbar, and further in view of Koyama. Still further, claims 97-101 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki, Akbar and Koyama, and further in view of Fukaya et al. (U.S. Patent 5,627,088 – hereafter Fukaya). These rejections are respectfully traversed at least for the reasons provided below.

With respect to the §103(a) rejection of claims 1 and 102 over Yamazaki in view of Akbar, the Examiner asserts that the feature of independent Claim 1 recited as “*a channel forming region in the first semiconductor active layer is formed by a self-aligning manner*”

using the floating gate as a mask” is disclosed in column 7, lines 25-37 of Akbar. However, Applicants respectfully assert that the self aligned source, drain and source/drain region of Akbar is formed after the completion of the control gate 142 and the select gate 144, as shown in column 7, lines 17-37 and Figure 10 of Akbar. Hence, in the case of Akbar, the control gate 142 is used as a mask when a channel forming region 157 of the memory thin film transistor is formed, as the select gate 144 is used as a mask when a channel forming region 160 of the switching transistor is formed.

In contrast with Akbar, in the presently claimed invention, the channel length of the thin film transistor is determined depending on the line width of the floating gate electrode, as supported on page 24, lines 21-23 of the specification, and the design of the control gate is free from the design of the channel forming region, while Akbar teaches the design of the control gate electrode that is limited by the design of the channel forming region. Applicants respectfully assert that Akbar fails to teach, disclose or suggest at least the feature wherein a channel forming region in the first semiconductor active layer is formed by a self-aligning manner using the floating gate as a mask of claim 1. Hence, the combination of Akbar with Yamazaki is improper.

In regard to the §103(a) rejection of claims 77, 84, 87, 90, and 93-96 over Yamazaki in view of Akbar and further in view of Koyama, the same argument submitted above is also applicable. That is, Akbar fails to teach, disclose or suggest the feature of independent Claim 77 wherein a channel forming region in the first semiconductor active layer is formed by a self-aligning manner using the floating gate as a mask. Hence, the combination of Akbar with Yamazaki and Koyama is improper as the combined references do not teach or suggest all of the claimed features.

The requirements for establishing a *prima facie* case of obviousness, as detailed in MPEP § 2143 - 2143.03 (pages 2100-122 - 2100-136), are: first, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference(s) to combine the teachings; second, there must be a reasonable expectation of success; and, finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations.

In view of the amendments and arguments set forth above, Applicants respectfully request reconsideration and withdrawal of all the pending rejections.

While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with Applicants' representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,



Luan C. Do
Registration No. 38,434

NIXON PEABODY LLP
Suite 900, 401 9th Street, N.W.
Washington, D.C. 20004-2128
(202) 585-8000
(202) 585-8080 (Facsimile)